



# MINING THE MANAGEMENT LITERATURE TO IMPROVE HEALTHCARE

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University  
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**Staff Seminar**

School of Management

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# ● ● ● OVERVIEW

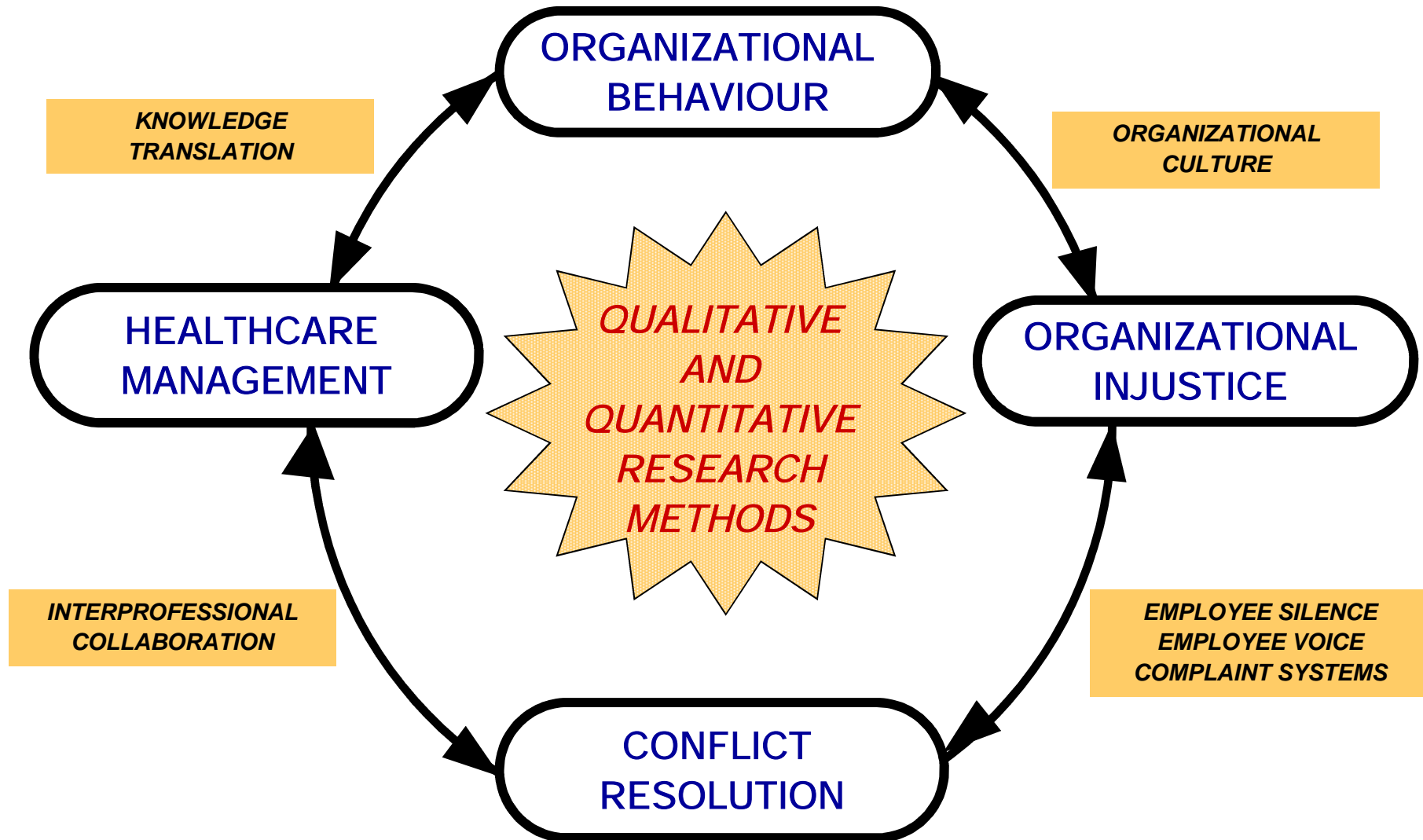
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- Professional Background
- Current Challenges
- Innovative Responses
- Research Sampler
  - Turnover Intentions of Hospital Administrators
  - Horizontal Bullying in Nurses
  - Mining the Management Literature for Insights into Evidence-Based Change in Healthcare
- Closing Thoughts

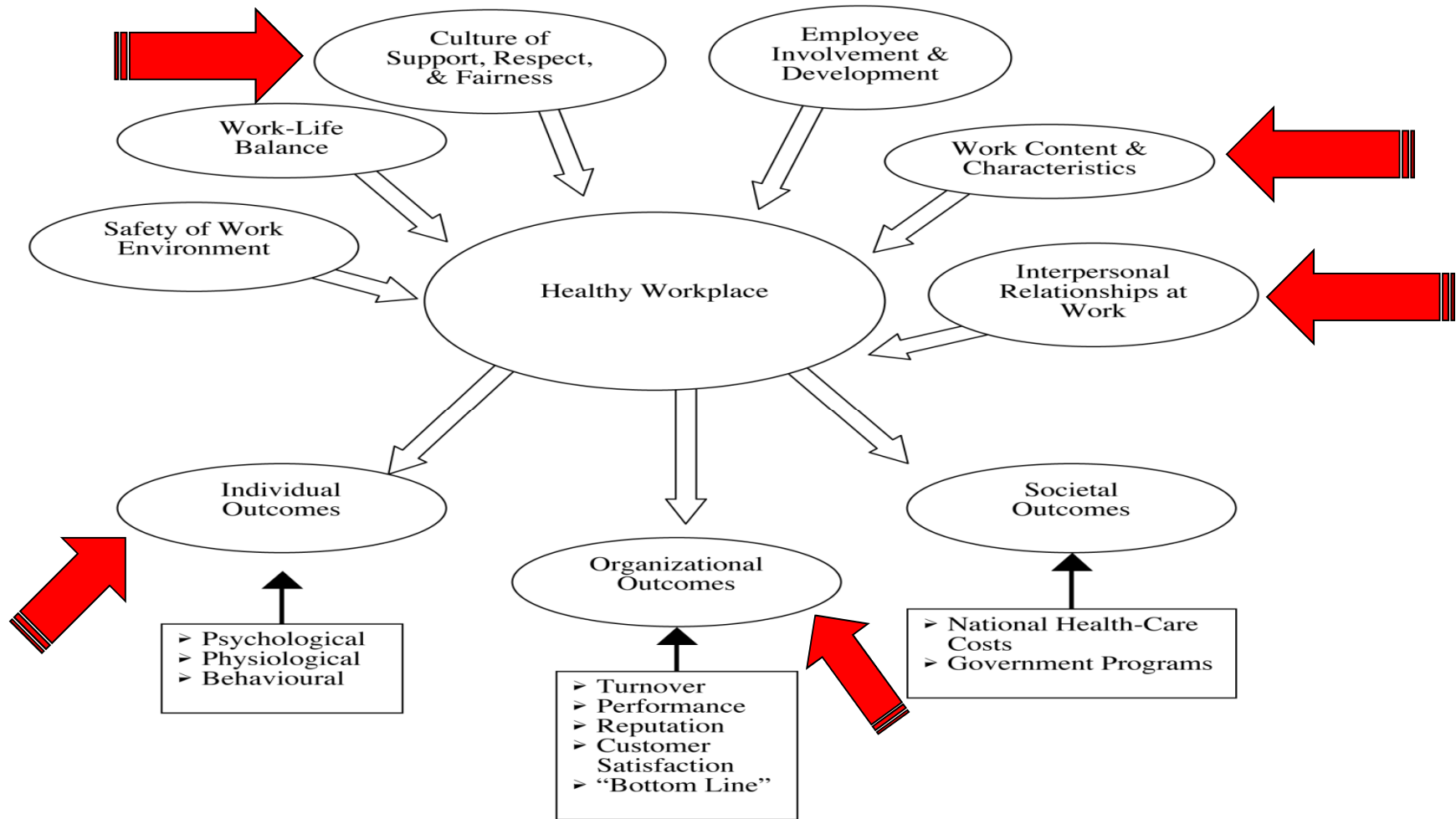


# RESEARCH INTERESTS

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# HEALTHY WORKPLACE MODEL



*Kelloway & Day, 2005*

# ● ● ● OBJECTIVES OF HEALTH CARE SYSTEM

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Improve health through services that:

- meet public needs
- quality
- equitable
- efficient
- good governance

# ● ● ● CHALLENGES

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● geographic

● clinical

● financial

● demographic

● legal

● organizational 

# ● ● ● CHALLENGES

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## ● organizational

### ● fragmentation

- system – organizational culture
- workforce – diverse values within and across major professional groups
- treatment – physician to non-physician ratio

early 1900s → 1:3

early 2000s → 1:16 (Shine, 2002)

### ● interdependence

### ● dispersed authority – different/competing norms and expectations across professional groups

### ● deterioration of working conditions – e.g., staff shortages, low morale, high turnover, burnout (Harlos & Axelrod, 2008, 2005; Shamian & El-Jardali, 2007)

# ● ● ● INNOVATIVE RESPONSES

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- Think *organizationally* (Ramanujam & Rousseau, 2006)
  - individuals/teams ↔ work environment
  - multiple causes, feedback loops
  - health organizations as high performance organizations

*But no cherry coke!*

- Integration
  - virtual
  - vertical
  - horizontal
    - university-health authority partnerships
    - healthcare management research (eg operations, orgl behaviour)



## ● ● ● INNOVATIVE RESPONSES (cont.)

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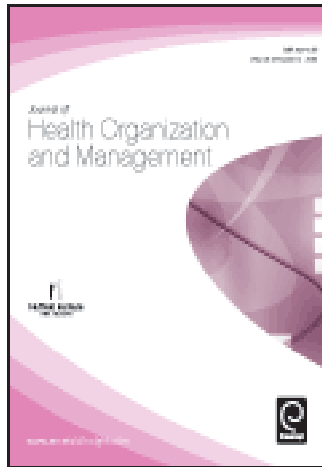
- Teamwork
  - Interprofessional collaboration
  - Interdisciplinary treatment teams
- Leadership development
- Organizational change
- Health human resources
- Healthy workplaces
- Knowledge translation



Canadian Health Services Research **Foundation**  
**Fondation** canadienne de la recherche sur les services de santé

## ● ● ● RESEARCH SAMPLER

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### Anger-Provoking Events and Intention to Turnover in Hospital Administrators

HARLOS, K. 2010. *Journal of Health Organization and Management*, 24(1): 45-56

#### Knowledge Gaps

- well-being and work conditions of health administrators → impact on turnover (Castle, 2006; Harlos & Axelrod, 2005)
- significant negative work events ↔ turnover in health employees (Cusp-catastrophe model)
- theorized but no empirical evidence that anger from events → turnover (Affective events theory)

## ● ● ● BACKGROUND

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- health workforce turnover key concern
  - cost
    - pan-industry:  $\approx \frac{1}{2}$  lost employee's salary (Abelson, 1990)
    - health care: high turnover rate AND high costs
      - annual turnover cost across job categories  $\approx 5\%$  annual operating budget (Waldman et al., 2004)
- hospital administrator turnover especially important
  - strategic focus of work
  - turnover rates > managers/professionals in other industries (Castle, 2006)
  - turnover-related productivity loss costs  
*second only to physicians* (Waldman et al., 2004)

## ● ● ● METHODS

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### *Measures*

- Negative work events
  - Person-related (hostile): 48%
  - Policy-related: 52%
  - Validity of interpretation as negative
    - Hostile
    - Unjust  
(next slide)

## Appendix A

## Summary of Factor Loadings for Oblimin Two-Factor Solution for Items

Evaluating Work Events (N = 104)

| Factors and Items                                      | Loadings    |             |
|--|-------------|-------------|
|  | Factor 1    | Factor 2    |
| <b>Factor 1: Hostility (<math>\alpha = .90</math>)</b> |             |             |
| Peaceful – Hostile                                     | <b>.927</b> | -.110       |
| Abusive – Supportive*                                  | .799        | .037        |
| Polite – Rude  | .755        | .061        |
| Malicious – Well-intentioned*                          | .751        | -.003       |
| Respectful – Offensive                                 | .692        | .239        |
| Harmful – Helpful*                                     | .634        | .010        |
| <b>Factor 2: Injustice (<math>\alpha = .84</math>)</b> |             |             |
| Just – Unjust  | -.084       | <b>.994</b> |
| Unfair – Fair*   | .028        | .687        |
| Acceptable – Unacceptable                              | .237        | .598        |
| <b>Factor correlations</b>                             |             |             |
| Factor 1   | --          |             |
| Factor 2   | .64         | --          |

Note. Boldface indicates highest factor loadings.

\*reverse-scored items.

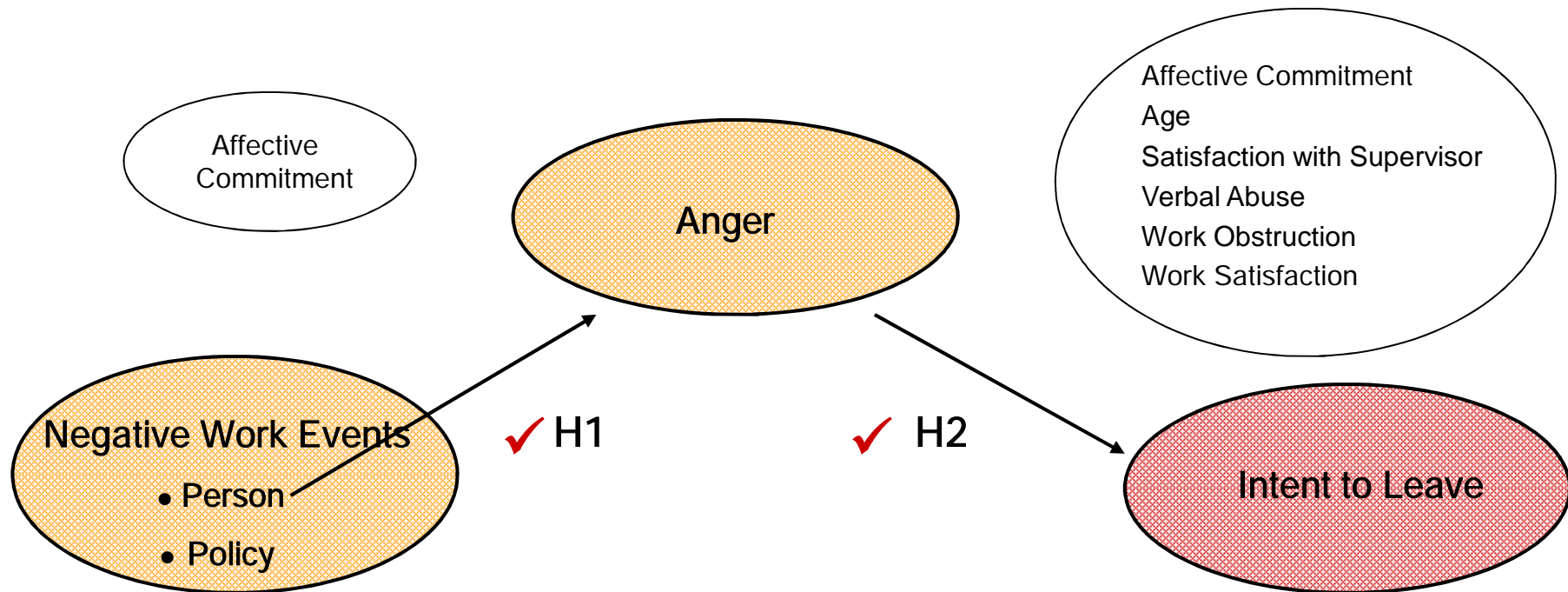
Mean Full 13 items: 5.88/7.00  
(sd = .88;  $\alpha = .91$ )

Mean Hostility factor: 5.53/7.00  
(sd = 1.10)

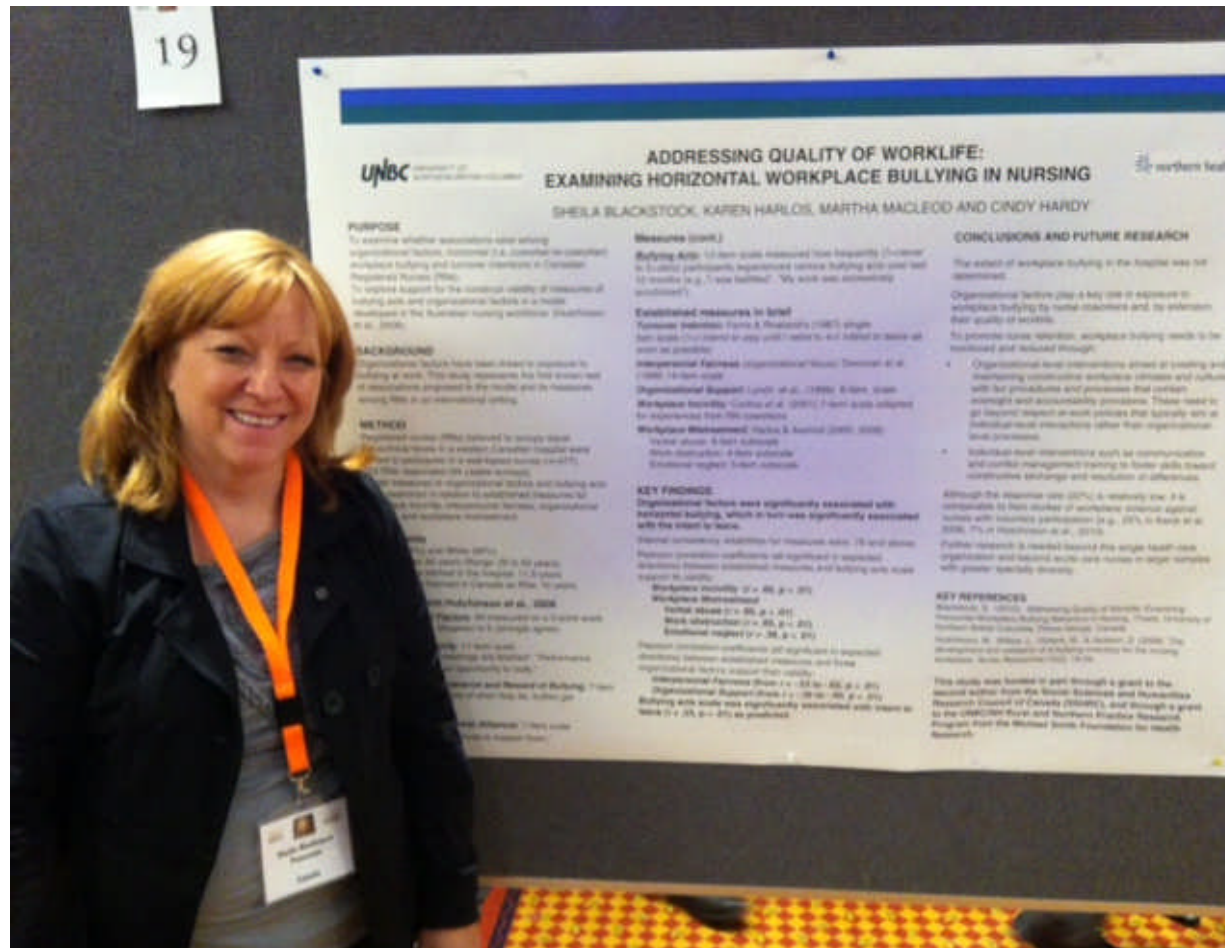
Mean Injustice factor: 6.10/7.00  
(sd = 1.01)

$$r_{\text{Event Type x Hostility}} = .43$$

# ● ● ● MODEL AND RESULTS



PRACTICE IMPLICATIONS - insights into controllable sources of anger for targeted interventions



Blackstock, S.,  
HARLOS, K.,  
MacLeod, M.,  
Hardy, C.  
(2012, October).  
***Examining  
horizontal  
workplace bullying  
behaviors in  
nursing.***  
3<sup>rd</sup> International  
Conference on Violence  
in the Health Sector,  
Vancouver BC.

## ● ● ● METHODS

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- Web-based survey (cross-sectional design; pilot tested)
- All registered nurses (RNs) at same hierarchical level in a western Canadian hospital ( $n=477$ )
- 103 RNs responded (22% response rate)

### Participants

- Female (85%) and Caucasian (89%)
- Avg age 42 years (range 26-60)
- Avg organizational tenure 12 years
- Avg term licensed as RN 16 years





***Role stressors as an outcome of horizontal workplace bullying.***

**HARLOS, K., Blackstock, S., MacLeod, M., Hardy, C. (2013, March).**

Western Academy of Management Conference, Santa Fe, NM.

Knowledge Gaps

- Horizontal workplace bullying generally, among nurses in particular
- Multidimensional model of antecedents and consequences

## ● ● ● METHODS

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### Measures

***Workplace Bullying*** : 9-item scale; frequency-based (1=*never* to 5=*daily*) of behaviors over last 12 months (e.g., “publicly humiliated”, “work excessively scrutinized”)

***Role Ambiguity*** : 6-item scale (1=*very false* to 5=*very true*) (e.g., “know exactly what is expected of me”)

***Role Conflict*** : 7-item scale (1=*very false* to 5=*very true*) (e.g., “receive incompatible requests from two or more people”)

***Role Overload***: 3-item scale (1=*very false* to 5=*very true*) (e.g. “I have too much work to do, to do everything well”)

Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964

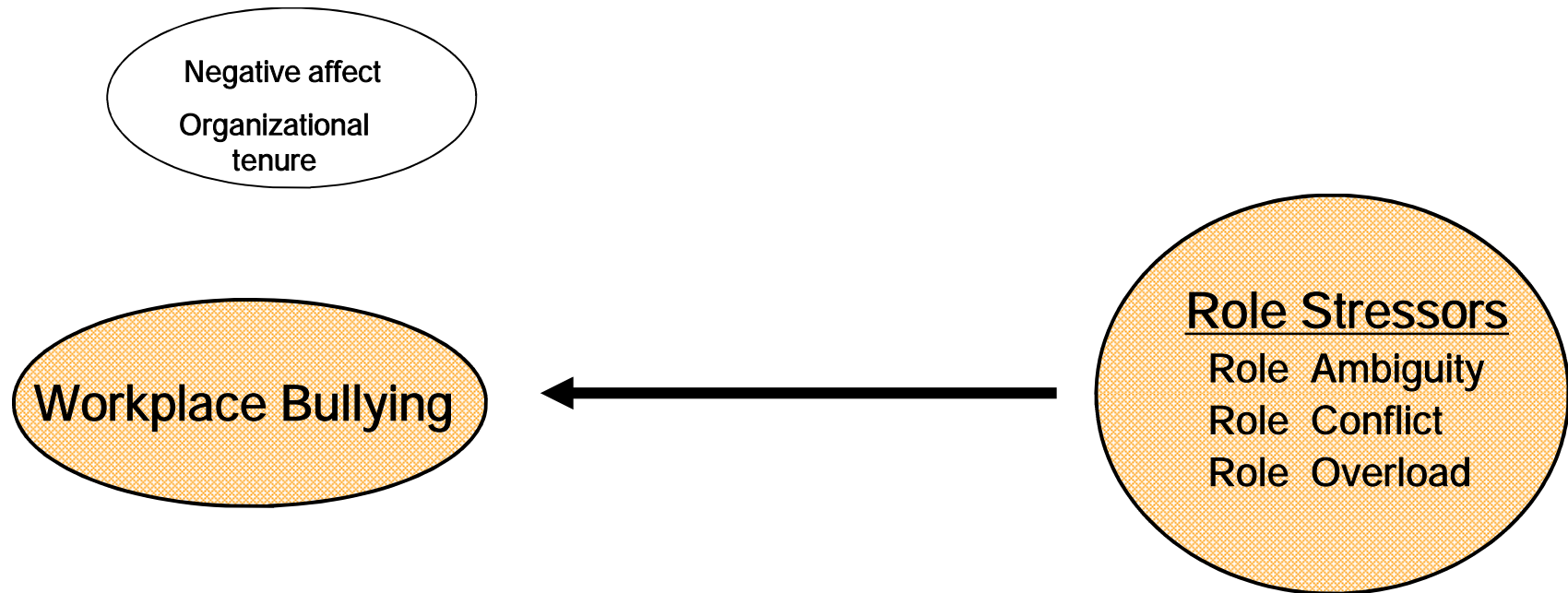
Rizzo, House, & Lirtzman, 1970

Beehr, 1995

Kelloway & Barling, 1990

● ● ● **MODEL**

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## ● ● ● KNOWLEDGE GAPS REMAIN

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- Research - more work on workplace bullying-role stress linkage
- Practice – codify and enforce anti-bullying policies
  - foster positive coworker relations

*Much to be gained from uncovering how and why bullying erodes the clarity, configuration, and capacity of work environments*



## Mining the Management Literature for Insights into Evidence-Based Change in Healthcare

HARLOS, Tetroe, Graham, Bird & Robinson, 2012.  
*Healthcare Policy*, 8(1): 33-48.

Open Access <http://www.longwoods.com/content/23016>

### Knowledge Gaps

- healthcare managers tend to ignore management literature
- change principles based on evidence often fail to be translated into practice or policy in healthcare organizations

Kiefer, Frank, Di Ruggiero et al. 2005

Wathen, Watson, Jack et al. 2008.

Davies, Walker, Grimshaw 2010

Dopson, Bennett, Fitzgerald et al. 2013

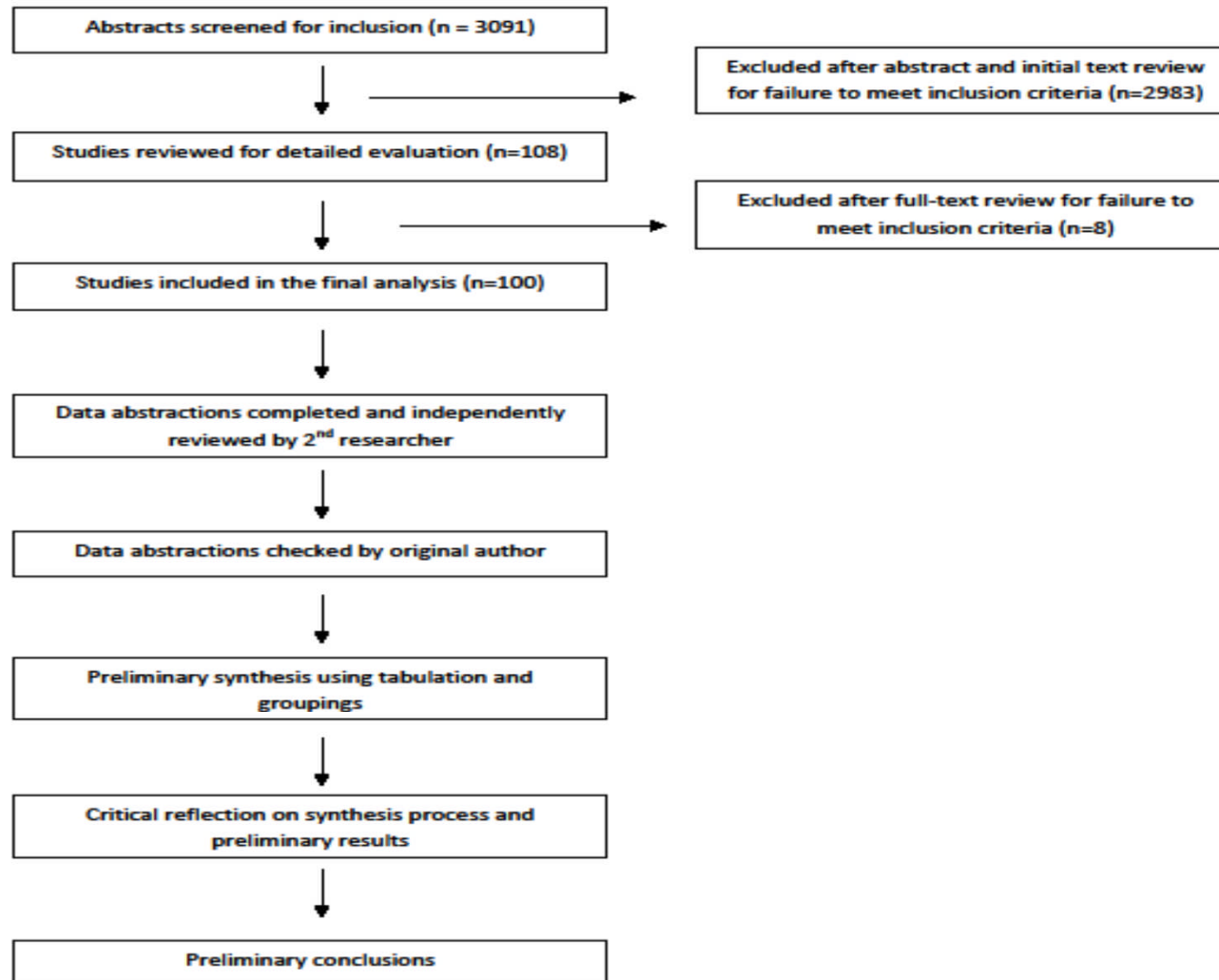
## ● ● ● KNOWLEDGE TRANSLATION IN HEALTHCARE

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- Many definitions of KT => what they have in common:  
“about turning research into action. It is about closing the gap between *knowing* and *doing*. It's about accelerating the capture and practical application of the knowledge uncovered by research.”

Knowledge to Action: A Knowledge Translation Casebook, CIHR 2008

Figure 1. Overview of the Synthesis Process





and other organizational conduits for translating knowledge into action. Both institutional- and individual-level networks feature prominently as pathways through which knowledge can be conveyed within and across healthcare organizations. These results are broadly consistent with past work highlighting the importance of multilevel networks in healthcare, such as that by Dopson (2007), who conceptualized networks as a contextual feature. The majority of studies on intervention messages, links and networks, and training were regarded as highly relevant to knowledge translation; only a few had either intermediate relevance (n=2) or secondary relevance (n=3).

**TABLE 1.** Change-related organizational factors, key concepts and implications for knowledge translation from studies of primary relevance to knowledge translation

| Organizational Factors                    | Individual Studies [Intervention readiness*]   | Key Concepts  | Implications for Knowledge Translation  |
|---|--|---|---|
| <b>Tailoring the Intervention Message</b> | <p>Allen, T.D., L.T. Eby and E. Lentz. 2006. "Mentoring Behaviors and Mentorship Quality Associated with Formal Mentoring Programs: Closing the Gap Between Research and Practice." <i>Journal of Applied Psychology</i> 91(3): 567-78. [2]</p> <p>Dutton, J.E., S.J. Ashford, R.M. O'Neill and K.A. Lawrence. 2001. "Moves that Matter: Issue Selling and Organizational Change." <i>Academy of Management Journal</i> 44(4): 716-36. [2]</p> <p>Ferlie, E., L. Fitzgerald, M. Wood and C. Hawkins. 2005. "The Nonspread of Innovations: The Mediating Role of Professionals." <i>Academy of Management Journal</i> 48(1): 117-34. [3]</p> <p>Hoff, T., H. Pohl and J. Bartfield. 2006. "Teaching But Not Learning: How Medical Residency Programs Handle Errors." <i>Journal of Organizational Behaviour</i> 27(7): 869-96. [2]</p> <p>Katz-Navon, T., E. Navah and Z. Stern. 2005. "Safety Climate in Health Care Organizations: A Multidimensional Approach." <i>Academy of Management Journal</i> 48(6): 1075-89. [3]</p> <p>Neal, A. and M.A. Griffin. 2006. "A Study of the Lagged Relationships Among Safety Climate, Safety Motivation, Safety Behavior and Accidents at the Individual and Group Levels." <i>Journal of Applied Psychology</i> 91(4): 946-53. [3]</p> <p>Razy, T., K. Golden-Biddle and K. Germann. 2006. "Legitimizing a New Role: Small Wins and Microprocesses of Change." <i>Academy of Management Journal</i> 49(5): 977-98. [2]</p> <p>West, M.A. and N.R. Anderson. 1996. "Innovation in Top Management Teams." <i>Journal of Applied Psychology</i> 81(6): 680-93. [2]</p> | <p>Support for innovation</p> <p>Team structure, process and characteristics (e.g., size, member tenure, proportion of innovators)</p> <p>Knowledge of organizational context</p> <p>Communication</p> <p>Professionals:<br/>Communities of practice<br/>Boundaries (social and cognitive)</p> <p>Safety climate</p> <p>Role creation, adaptation and legitimization</p> <p>Mentoring behaviours and quality</p> <p>Barriers and best practices to learning from medical errors</p> | <p>Effective knowledge translation in healthcare organizations relies on planned tailoring and delivery of messages that account for the roles of individuals (e.g., knowledge brokers, influence agents and other members), organizational climate and structural features, as well as hierarchical power patterns in initiating change (i.e., top-down vs. bottom-up)</p> |



TABLE 1. Continued

|  |   |   |   |
|--|---|---|---|
| <b>Institutional Links/Social Networks</b> | <p>Forte et al. 2005. (See Tailoring the Intervention Message)</p> <p>Gittel, J.E. and L. Whites. 2004. "Coordination Networks Within and across Organizations: A Multi-Level Framework." <i>Journal of Management Studies</i> 41(1): 128-53. [2]</p> <p>Goes, J.B. and S.H. Park. 1997. "Interorganizational Links and Innovation: The Case of Hospital Services." <i>Academy of Management Journal</i> 40(3): 673-96. [2]</p> <p>Provan, K.G. and J.G. Sebastian. 1998. "Networks within Networks: Service Link Overlap, Organizational Cliques and Network Effectiveness." <i>Academy of Management Journal</i> 41(4): 453-63. [3]</p> <p>Westphal, J.D., R. Gulati and S.M. Shortell. 1997. "Customization or Conformity? An Institutional and Network Perspective on the Content and Consequences of TQM Adoption." <i>Administrative Science Quarterly</i> 42(2): 366-94. [3]</p> | <p>Intra-organizational and inter-organizational linkages, coordination mechanisms, integration and networks</p> <p>Innovation support through adoption of new services and technologies</p> <p>Timing of innovation adoption</p> <p>Stage of adopters (early vs. late)</p> <p>Institutional ties</p>         | <p>Knowledge transition capacity in health organizations is built by coordinated institutional and individual networks of knowledge users within and across organizational units, which can act as dissemination vehicles</p> |
| <b>Training</b>                            | <p>Allen and Lentz 2006. (See Tailoring the Intervention Message)</p> <p>Goodrick, E. and G.R. Sabinick. 1996. "Organizational Discretion in Responding to Institutional Practices: Hospitals and Cesarean Births." <i>Administrative Science Quarterly</i> 41(1): 1-28. [2]</p> <p>Hoff et al. 2006. (See Tailoring the Intervention Message)</p>  | <p>Mentoring behaviours and quality</p> <p>Clarity of practice guidelines</p> <p>Barriers and best practices for learning from medical errors</p>   | <p>Clear standards and targets for training to induce change enhances uptake</p> <p>Mentoring as a means of training supports knowledge transition provided that power relations do not inhibit interpersonal exchange</p>    |
| <b>Quality of Work Relationships</b>       | <p>Edmondson, A.C. 2003. "Speaking Up in the Operating Room: How Team Leaders Promote Learning in Interdisciplinary Action Teams." <i>Journal of Management Studies</i> 40(6): 1419-52. [2]</p> <p>Nembhard, L.M. and A.C. Edmondson. 2006. "Making It Safe: The Effects of Leader Inclusiveness and Professional Status on Psychological Safety and Improvement Efforts in Health Care Teams." <i>Journal of Organizational Behaviour</i> 27(7): 941-66. [3]</p> <p>West and Anderson 1996. (See Tailoring the Intervention Message)</p>   | <p>Support for innovation</p> <p>Team structure, process and characteristics (e.g., preparation, stability, boundary spanning, team leader coaching, leader inclusiveness)</p> <p>Information infrastructure</p> <p>Professional rank, status (i.e., power) differences</p> <p>Communication and exchange</p> | <p>Key for effective knowledge transition in healthcare organizations is support for innovation, fostered by clear rationales for change, open exchange despite power differences, and employee engagement</p>                |
| <b>Fit to Organization</b>                 | <p>Dukerich, J.M., B.R. Golden and S.M. Shortell. 2002. "Beauty Is in the Eye of the Beholder: The Impact of Organizational Identification, Identity and Image on the Cooperative Behaviors of Physicians." <i>Administrative Science Quarterly</i> 47(3): 507-33. [3]</p>  | <p>Strength of perceived organizational identity</p> <p>Perceived image of organization</p>   | <p>Knowledge transition is enhanced through cooperation when health professionals positively perceive and identify with the organization</p>  |

\* Intervention readiness: 1 = high; 2 = medium; 3 = low

TABLE 2. Citation analysis of first authors of studies with primary relevance to knowledge translation

| First Author | Management | Business | Public Administration | Psychology | Industrial Relations and Labour | Education and Educational Research | Social Sciences, Interdisciplinary | Mathematics, Interdisciplinary | Other | Public, Environmental, Occupational Health | Healthcare Sciences and Services | Health Policy and Services | Nursing |
|--------------|------------|----------|-----------------------|------------|---------------------------------|------------------------------------|------------------------------------|--------------------------------|-------|--|----------------------------------|----------------------------|---------|
| Allen        | 10         | 8        |                       | 12         | 1                               |                                    |                                    | 1                              |       |  |                                  |                            |         |
| Dukerich     | 44         | 29       |                       | 22         |                                 |                                    |                                    |                                | 4     |  |                                  |                            |         |
| Dutton       | 1          |          |                       |            |                                 |                                    |                                    |                                |       |  | 8                                | 6                          |         |
| Edmondson    | 34         | 17       |                       | 18         |                                 |                                    |                                    |                                |       |  |                                  |                            |         |
| Ferlie       | 23         | 10       | 7                     |            |                                 |                                    |                                    |                                |       |  | 14                               | 18                         |         |
| Gittel       | 12         | 1        |                       |            |                                 |                                    |                                    |                                | 10    | 2  | 2                                | 2                          |         |
| Goes         | 35         | 26       |                       | 5          |                                 | 2                                  |                                    | 4                              |       |  | 8                                | 14                         | 2       |
| Goodrick     | 37         | 22       |                       |            |                                 | 4                                  |                                    |                                |       | 4  |                                  | 3                          |         |
| Hoff         | 1          | 1        |                       | 2          |                                 |                                    |                                    |                                |       |  |                                  | 1                          | 1       |
| Katz-Novak   | 11         | 4        |                       | 7          |                                 |                                    | 2                                  |                                | 9     | 4  | 6                                |                            | 2       |
| Neal         | 7          | 5        |                       | 9          |                                 |                                    | 9                                  | 1                              | 11    |  | 3                                | 4                          |         |
| Nambhard     | 6          | 3        |                       | 3          |                                 |                                    |                                    |                                |       |  |                                  | 9                          | 3       |
| Provan       | 12         | 7        | 12                    | 2          |                                 |                                    |                                    |                                |       |  |                                  | 4                          |         |
| Rozy         | 11         | 6        |                       |            |                                 |                                    | 1                                  |                                | 3     |  | 1                                | 1                          |         |
| West         | 58         | 32       |                       | 62         |                                 |                                    |                                    |                                |       |  |                                  |                            |         |
| Westphal     |            | 1        |                       |            |                                 |                                    |                                    |                                |       |  |                                  |                            |         |

is the potential for bias in all syntheses. In this instance, it is possible that conclusions might vary if a different set of target journals were used. However, the sampling approach here is intended to be a comprehensive, rather than an exhaustive, search for high-quality management knowledge grounded in the contemporary realities of healthcare settings. At the same time, feasibility concerns precluded systematic searching beyond the pool of 3,091 studies across the 10-year time frame of five journals with full issue reviews. Our synthesis process of hand-searching each issue over the sampling period, abstracting data from each study, confirming the accuracy of abstractions with authors, and preparing the database is labour intensive and

## ● ● ● IMPLICATIONS

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- reinforces prominent role of social relations in knowledge exchange (Rynes et al. 2001), affirming Rogers' (1995) observation that KT fundamentally is a social process
- multiple features of healthcare organizations should inform effective responses to organizational challenges through change and KT processes
- need for cross-disciplinary collaboration
- need for intervention studies to test theory-informed explanations and practice-driven solutions

## ● ● ● CLOSING THOUGHTS

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- Organizational challenges, including unhealthy workplace and HHR problems, still with us
- Employment relations roots
- Need intervention studies to test theory-informed explanations and practice-driven solutions
- Need broad-based collaborations among management and health researchers, practitioners and policymakers to design and implement improvements – locally and beyond

● ● ● **THANKS FOR LISTENING**

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